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JOSEPH S. TRIPOLI
THOMSON MULTIMEDIA LICENSING INC.
2 INDEPENDENCE WAY
P.O. BOX 5312
PRINCETON, NJ 08543-5312

EXAMINER	
TRAN, TRANG U	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/845,959	ANEJA ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9,11 and 13-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-9, 11 and 13-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Feb. 13, 2004 have been fully considered but they are not persuasive.

In re pages 7-9, applicants argue that Knox et al does not appear to disclose or suggest "storing a pixmap...large enough to encompass the first and second raster sizes" let alone the "storing a first header set pointing to a first pixmap region, the first pixmap region fitting the first raster size" and "storing a second header set pointing to second pixmap region, the second pixmap region fitting the second raster size" elements recited in claim 1.

In response, the examiner respectfully disagrees. Knox et al discloses in col. 3, lines 54-56 that "**An OSD bit map is defined as a set of regions (generally in rectangular shapes) of programmable position and size**, each of which has a unique palette of available colors" and in col. 4, lines 1-6 that "More specifically, the processor 130 programs (formats and stores) the OSD header in the memory 140. The OSD header contains information concerning the locations of the top and bottom OSD field bit maps, palette data pointer to the next header block and **various display modes involving OSD resolution**, color and compression". From the above passages, it is clear that the OSD bit map of Knox et al stores "a pixmap...large enough to encompass the first and second raster sizes (various display modes involving OSD resolution)" as recited in claim 1 and the processor 130 of Knox et al stores "a first header set (OSD header) pointing the a first pixmap region, the first pixmap region fitting the first raster

size (various display modes involving OSD resolution)" as recited in claim 1 and stores "a second header set (OSD header) pointing to second pixmap region, the second pixmap region fitting the second raster size (various display modes involving OSD resolution)" as recited in claim 1. Thus, Knox et al does indeed disclose all the claimed limitations of claim 1.

In re page 9, applicants state that independent claim 11 is amended to include element similar to the element of amended independent claim 1 and should therefore be allowable for the same reasons discussed above as well as for the additional recitations contained therein.

In response, as discussed above with respect to claim 1, Knox et al discloses all the limitations of claim 1 and; thus, discloses all the claimed limitations of claim 11.

In re page 9, applicants state that dependent claim 16, being dependent on and further limiting independent claim 11, should be allowable for that reasons, as well as for the additional recitations that if contains.

In response, as discussed above with respect to claim 1, Knox et al discloses all the limitations of claim 1 and; thus, discloses all the claimed limitations of claim 11 and its dependent claim 16.

In re page 9, applicants state that claims 17 and 18 depend from claim 16 that, in turn, depends from independent claim 11 and should be allowable for the same reasons as discussed for claims 11 and 16 as well as for the additional recitations contained therein.

In response, as discussed above with respect to claim 1, Knox et al discloses all the limitations of claim 1 and; thus, discloses all the claimed limitations of claim 11 and its dependent claims 17-18.

In re pages 9-13, applicants argue that Knox et al and Min et al, alone or in combination, do not teach or suggest the "storing a pixmap...large enough to encompass the first and second raster sizes", "storing a first header set pointing to a first pixmap region, the first pixmap region fitting the first raster size", and "storing a second header set pointing to a second pixmap region, the second pixmap region fitting the second raster size" limitations of amended claim 9.

In response, as discussed above with respect to claim 1, Knox et al discloses the above claimed limitations of claim 9.

In re page 13, applicants state that dependent claims 13-15, being dependent on and further limiting independent claim 11, should be allowable for that reasons, as well as for the additional recitations that they contain.

In response, as discussed above with respect to claim 1, Knox et al discloses all the limitations of claim 1 and; thus, discloses all the claimed limitations of claim 9 and its dependent claims 113-15.

In re page 13, applicants state that amended independent claim 19 includes elements similar to the elements of amended independent claim 9 and should be allowable for the same reasons discussed above as well as for the additional recitations that contained therein.

In response, as discussed above with respect to claim 1, Knox et al discloses all the limitations of claim 1 and; thus, discloses all the claimed limitations of claim 19.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 11 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 1, Knox et al discloses all the claimed subject matter, note 1) the claimed storing a pixmap containing a plurality of pixel lines, said pixmap being large enough to encompass the first and second raster sizes is met by the OSD unit 150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed storing a first header set pointing to a first pixmap region, the first pixmap region fitting the first raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed storing a second header set pointing to a second pixmap region, the second pixmap region fitting the second raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 4) the claimed detecting whether a displaying mode is in the first displaying mode or the second displaying mode is met by the processor 130 which detects the Field Doubling mode or Non-Field Doubling mode (normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7,

line 65), 5) the claimed using the first header set to display the first pixmap region when the detected displaying mode is the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 6) the claimed using the second header set to display the second pixmap region when the detected displaying mode is the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

Claim 11 is rejected for the same reason as discussed in claim 1.

In considering claim 16, the claimed wherein the first displaying mode and the second displaying mode display a different number of pixel lines and a different number of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig. 3, col. 6, line 24 to col. 7, line 27).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 17, Knox et al disclose all the limitations of the instant invention as discussed in claims 11 and 16 above, except for providing the claimed wherein the first displaying mode displays 480 pixel lines with each of the pixel lines

containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels into Knox et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 18, Knox et al disclose all the limitations of the instant invention as discussed in claims 11 and 16 above, except for providing the claimed wherein the first displaying mode is 2H mode and the second displaying mode is 2.14H mode. Using the first displaying mode is 2H mode and the second displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode is 2H mode and the second displaying mode is 2.14H mode into Knox et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

6. Claims 3, 13-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. (US Patent No. 6,480,238 B1) in view of Min et al. (US patent No. 6,462,746 B1).

In considering claim 3, Knox et al disclose the claimed further comprising the steps of: chaining the headers in the first header set and chaining the headers in the second header set is met by the OSD region coordinates 214 which include a "next header pointer" 244 for pointing to the next header block in the memory 140 (Fig. 2, col. 5, lines 45-65). However, Knox et al explicitly does not disclose the claimed wherein the first and second header sets contain a plurality of headers. Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the command area including an OSD global header and multiple OSD local headers as taught by Min et al into Knox et al's system in order to minimize a size of the memory occupied by the command and to allow an external host processor to control the command more effectively.

In considering claim 4, Knox et al discloses all the claimed subject matter, note 1) the claimed further comprising the steps of: using each of the headers in the first header set to point to one of the pixel lines in the pixmap in the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and

2) the claimed using each of the individual headers in the second header set to point to one of the pixel lines in the pixmap in the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

In considering claim 5, the claimed further comprising the steps of: using each of the headers in the first header set to select a number of pixels in each of the pixel lines in the first displaying mode and using each of the headers in the second header set to select a number of pixels in each of the pixel lines in the second displaying mode is met by the OSD local header information (Fig. 8, col. 7, line 54 to col. 9, line 20) of Min et al.

In considering claim 6, the claimed wherein the first displaying mode and the second displaying mode display a different number of pixel lines and a different number of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig. 3, col. 6, line 24 to col. 7, line 27) of Knox et al.

In considering claim 7, the combination of Knox et al and Min et al disclose all the limitations of the instant invention as discussed in claims 1-6 above, except for providing the claimed wherein the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode displays 480

pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels into the combination of Knox et al and Min et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 8, the combination of Knox et al and Min et al disclose all the limitations of the instant invention as discussed in claims 1-6 above, except for providing the claimed wherein the first displaying mode is 2H mode and the second displaying mode is 2.14H mode. Using the first displaying mode is 2H mode and the second displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode is 2H mode and the second displaying mode is 2.14H mode into the combination of Knox et al and Min et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 9, Knox et al discloses all the claimed subject matter, note 1) the claimed storing a pixmap containing a plurality of pixel lines, said pixmap being large enough to encompass the first and second raster sizes is met by the OSD unit 150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed storing a first header set containing one header pointing to the first pixmap region, the first pixmap region fitting the first raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed storing a second header set pointing to the second pixmap region, the second pixmap region fitting the second raster size is met by the OSD bitstream (Fig. 2,

col. 5, line 21 to col. 6, line 22), 3) the claimed detecting whether a displaying mode is in the first displaying mode or the second displaying mode is met by the processor 130 which detects the Field Doubling mode or Non-Field Doubling mode (normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7, line 65), 4) the claimed using the first header set to display the first pixmap region when the detected displaying mode is the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 5) the claimed using the second header set to display the second pixmap region when the detected displaying mode is the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

However, Knox et al explicitly does not disclose the claimed storing the second header set contain a plurality of headers.

Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the command area including an OSD global header and multiple OSD local headers as taught by Min et al into Knox et al's system in order to minimize a size of the memory occupied by the command and to allow an external host processor to control the command more effectively.

Claims 13-15 are rejected for the same reason as discussed in claims 3-5, respectively.

Claim 19 is rejected for the same reason as discussed in claim 9.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller,** can be reached at **(703) 305-4795.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

MICHAEL H. LEE
PRIMARY EXAMINER

TT TT
May 1, 2004